

**CALIFORNIA PUBLIC EMPLOYEES' RETIREMENT SYSTEM
STATEMENT OF INVESTMENT POLICY**

**FOR
COMMODITIES PROGRAM**

December 18, 2006

This Policy is effective immediately upon adoption and supersedes all previous policies pertaining to the use of commodities within the Program.

I. PURPOSE

This document sets forth the investment policy ("the Policy") for the CalPERS Commodities Program ("the Program"). The design of this Policy ensures that the commodities exposure of the California Public Employees' Retirement System ("the System") is managed with prudence and care. Additionally, use of this Policy provides assurance that there is sufficient flexibility in controlling investment risks and returns associated with the use of [derivative](#) instruments.

The Program has two component parts:

1. Managed allocation to commodities
2. Commodity hedging - execution of hedging for asset classes to offset commodity risk to the System's portfolio

The policy has been broken into a general program overview which explains and sets forth the common elements of the program and two attachments which reflect parameters of the two component parts of the program.

Attachment 1 details the managed allocation to commodities. Attachment 2 details commodity hedging as a means to offset commodity risk to the System's portfolio.

II. STRATEGIC OBJECTIVE

The primary objectives of the Program are:

- A. Diversify the System's Investment Program;
- B. Enhance the System's total return; and to

- C. Execute bonafide hedges to offset commodity risk for all assets within the System.

III. RESPONSIBILITIES AND DELEGATIONS

- A. The **System's Investment Committee** ("Investment Committee") is responsible for approving and amending the Policy and delegates responsibility for administering the Program to the System's Investment Staff through the Delegation of Authority (Delegation Nos. 89-13 and 06-03-INV).
- B. The **System's Investment Staff's** ("the Staff") duties include, but are not limited to, the following:
 - 1. Reporting to the Investment Committee annually about the performance and compliance of the Program;
 - 2. Maintaining a procedures manual which is subject to periodic review and updating that outlines staff's operational procedures used in implementing this Policy; and to
 - 3. Report immediately all violations of the Policy to the Chief Investment Officer (CIO) and quarterly to the Investment Committee with explanations and a plan of action to prudently remedy any violations.
- C. The **General Pension Consultant** (the "General Pension Consultant") shall monitor performance and report to the Investment Committee on a quarterly basis, in accordance with their contract.
- D. The **Commodities Consultant** is responsible for monitoring and evaluating the Program and reporting to the Investment Committee at least annually.

IV. PERMITTED INSTRUMENTS

The following classes of investments are permitted instruments within the Program:

- A. **Futures** - Commodity futures contracts which are [Commodities and Futures Trading Commission \(CFTC\)](#) -approved are permitted.
- B. **Options** - Options on commodity futures or baskets of commodity futures are permitted.

- C. [Swaps](#) - Swaps which provide for the receipt of the rate of return of the permitted [cash market](#), futures market, commodity index or sub-index instruments are permitted.
- D. [Structured Notes](#) - Structured notes linked to the return of single commodities or baskets and hybrid structures with other assets are permitted.

V. LISTING REQUIREMENTS

Derivatives, which are futures contracts, shall be CFTC approved and exchange-traded. Options may either be exchange-traded or traded [over-the-counter](#) (OTC). If traded over-the-counter, staff shall adhere to the counter-party guidelines.

VI. COUNTER-PARTY REQUIREMENTS

- A. [Counter-party](#) creditworthiness, for non-exchange traded derivatives, shall be at a minimum of "A3" as defined by Moody's Investor Service, "A-" by Standard & Poor's and "A-" by Fitch. The use of counter-parties holding a split rating with one of the ratings below A3/A- is prohibited. The use of unrated counter-parties is prohibited.
- B. Individual counter-party exposure, for non-exchange traded commodity derivatives, is limited to 50% of the notional amount of the System commodity derivative exposure. An exception is allowed if the total commodity derivative exposure is less than \$350 million.
- C. Any entity acting as counterparty shall be regulated in either the United States or the United Kingdom.

VII. GLOSSARY OF TERMS

Definitions for key words used in this policy are located in the Miscellaneous Glossary of Terms which is included in the System's Master Glossary of Terms.

Commodities Program

Approved by the Policy Subcommittee: December 15, 2006

Adopted by the Investment Committee: December 18, 2006

Attachment 1

MANAGED ALLOCATION TO COMMODITIES**I. BENCHMARK**

The benchmark for the managed allocation shall be a combination of 90% (Goldman Sachs Commodity Index - Excess Return ("[GSCI-ER](#)") minus cost of swap fees (25 basis points)) + 100% (three month Treasury Bill returns rebalanced quarterly). The index combines the GSCI-ER index which is a world production weighted commodity index with the returns of three month Treasury Bills that will be utilized to measure a fully collateralized index.

II. PROGRAM PARAMETERS / RISKS

- A. [Leverage](#) - Investments in commodities derivatives shall be fully collateralized initially and rebalanced on a quarterly basis.
- B. **Collateral risk** will be managed according to and in compliance with the Dollar-Denominated Fixed Income Limited-Duration Policy.
- C. **Liquidity risk** shall be managed in a disciplined manner by maintaining numerous relationships with diverse counterparties.
- D. **Legal risk** will be minimized by not engaging in derivative transactions where such transactions are unenforceable under the laws of the governing jurisdiction and will be governed by an International Swaps Derivatives Association ([ISDA](#)) agreement where applicable.
- E. **Pricing risk** will be minimized by using standardized or market accepted instruments for over-the-counter (OTC) derivatives. Exchange-traded derivatives will be used when appropriate to minimize pricing risk in general.

- F. **Sector Risk** will be managed by looking at various secular and cyclical factors to determine the appropriate risk exposure relative to the index.

Sector Ranges: The following are ranges by which actual allocations can fluctuate from the benchmark sector weightings:

Sector	Benchmark Commodity Weight*	Sector Range
Energy	68.8%	40-100%
Metals	14.1	0-40
Food	17.1	0-40
GSCI Index Total	100.00%	

* Benchmark commodity weights as of October 31, 2006. Commodities weightings within the GSCI represent World Production Weights which are calculated each year based on a 5 year rolling average versus Percentage Dollar Weights which fluctuate dynamically as prices change throughout the day.

Attachment 2

COMMODITY HEDGING

I. BENCHMARK

The benchmark is not applicable for the measurement of System hedging.

II. PROGRAM PARAMETERS / RISKS

- A. **System Hedging** – The program will facilitate the execution of commodity transactions for hedging purposes of the System. Hedging activity in other asset classes shall be determined by the respective SIO, and implemented by the commodities team.
1. **Hedge ratio** – the appropriate size of the hedge will be determined in coordination with the SIO of the asset class seeking the hedge and commodities team.
 2. **Hedge Vehicle** – the hedge vehicle or the underlying hedging instrument will be determined by the commodities team in coordination with the SIO of the asset class seeking the hedge.
 3. **Leverage** – not applicable
 4. **Hedge-rebalancing** – will be determined by the commodities team in coordination with the SIO of the asset class seeking the hedge but reviewed at least annually.
- B. **Liquidity risk** is the ease with which a specific amount can be sold at or near market prices. Liquidity risk shall be managed in a disciplined manner by maintaining numerous relationships with diverse counterparties.
- C. **Legal risk** will be minimized by not engaging in derivative transactions where such transactions are unenforceable under the laws of the governing jurisdiction and will be governed by an International Swaps Derivatives Association agreement where applicable.
- D. **Pricing risk** will be minimized by using standardized or market accepted instruments for over-the-counter (OTC) derivatives. Exchange-traded derivatives will be used when appropriate to minimize pricing risk in general.